f Week in Review: 04/07/03 –04/14/03

Keith Gollwitzer – FNAL

- Store and Operations Summary
- Standard Plots

Store Summary

Store	Initial Lumi (E30)	Deliv'd Lumi (nb ⁻¹)	Termination	Duration (hr)	Comments
2402	31.3	1450	Intentional	20.9	140mA Stack, 5 proton bunch coalescing
2411	29.8	899	Abort	12.3	150mA Stack, 7 proton bunch coalescing 2 pbar Transfers without 53MHz Cause of abort unknown
2420	27.0	1033	Intentional	18.4	130mA Stack, 7 proton bunch coalescing After 1Shift Access & 24hr fix to ORBMP Poor distribution of pbar intensities
2422	29.9	1328	Intentional	19.6	130mA Stack, 7 proton bunch coalescing
2424	35.1	1486	Intentional	18.8	150mA Stack, 7 proton bunch coalescing
2426	37.1	222	Abort	1.8	150mA Stack, 7 proton bunch coalescing Suspect power supply of small low β quad

Summary of Woes

Proton Source

- B:ORBMP water leak & power supply maintenance/repair
- Booster injection fallout

Antiproton Source

- A:IB lost 104mA stack
- pbar production rate drops and recovers

TeV

- Abort of store (Thur) is not understood
- Quenches during studies
- Recovery from access shift
- Abort due to low β quad power supply

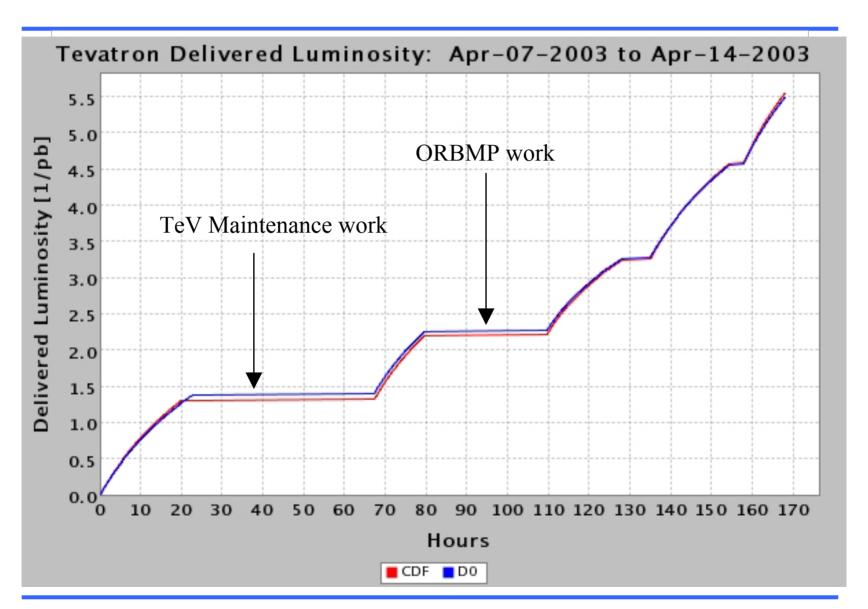
Unscheduled Access Shift

- When ORBMP repair estimate went to 8hr, "triggered" access shift for all enclosures except pbar (preserve 105mA stack).
- All work (beams and experiments) done in 8hr.
- Beams Division Access/Work Highlights:
 - Recycler vacuum leak repaired
 - LRF4 replaced by tube from Burle
 - 20+pages of work lists (1-8 jobs/page)
 - Reviewed
 - Approved
 - Performed

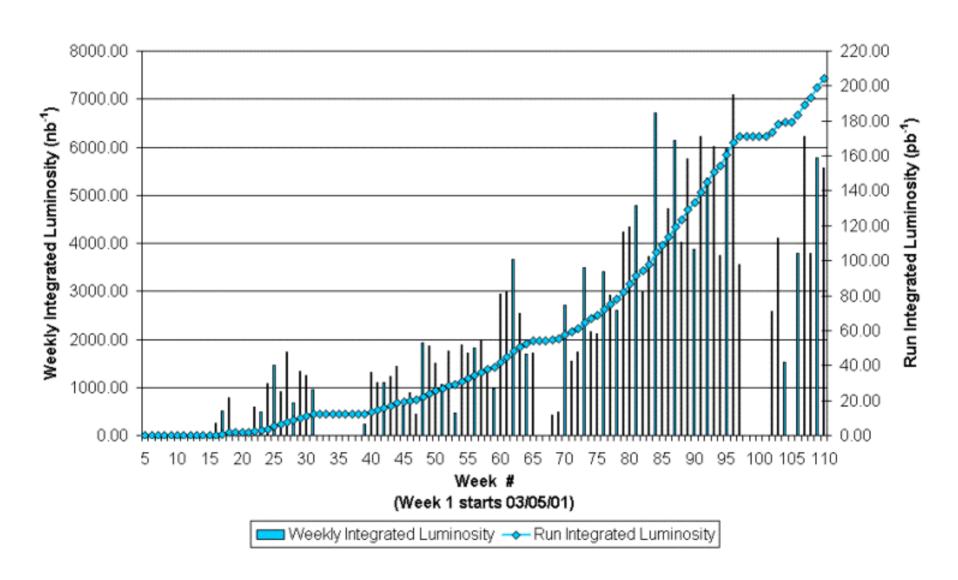
Maintenance & Studies

- Last Week
 - TeV: Orbit Smoothing, Feed-downs @ low β,
 Dampers, 7 bunch coalescing (losses up ramp), F0
 aperture, Chromaticity measurement method
 - Pbar: Supported TeV pbar lifetime studies
 - MI: Coalescing, Hysteresis, 2.5MHz Acceleration
 - Recycler: TBT Lattice Measurements, Tune shifts
- This Week
 - Stack and Store
 - TeV performance will determine if maintenance work is needed; studies as opportunities present themselves (<u>now</u>)



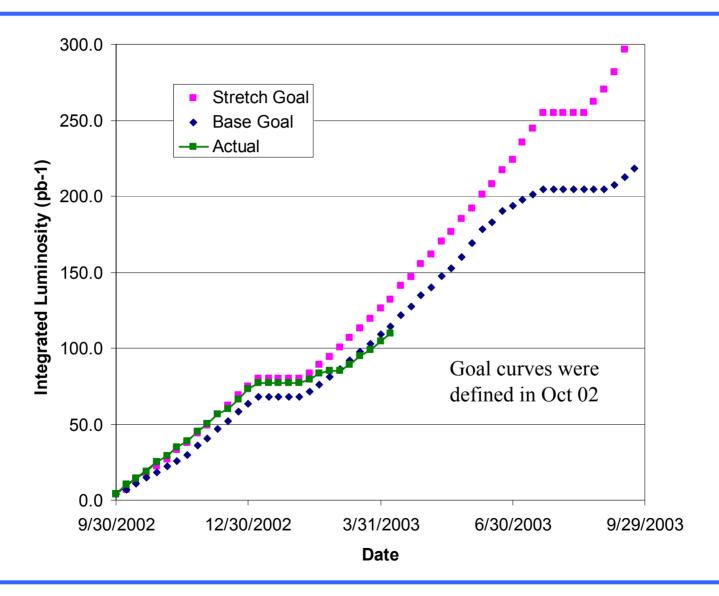


Collider Run IIA Integrated Luminosity

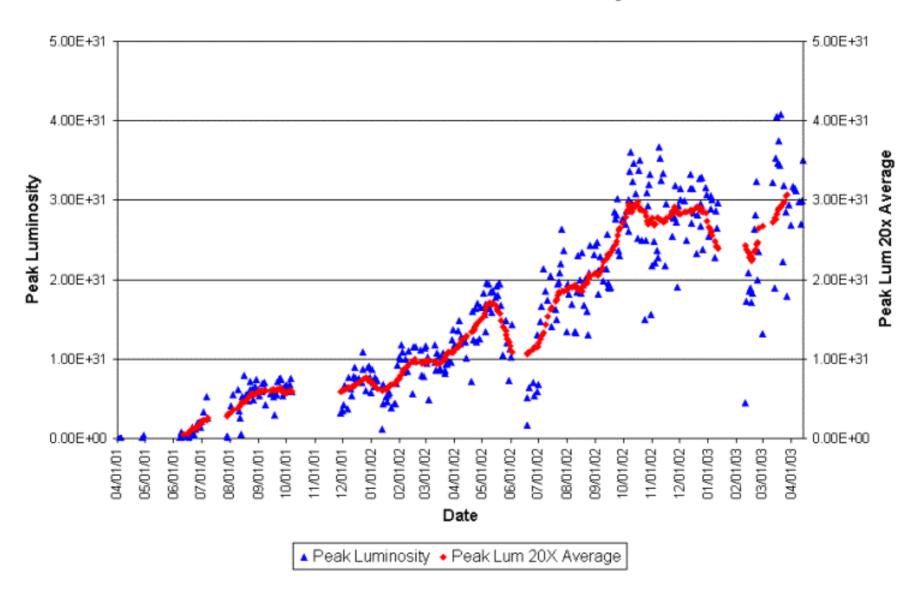




Integrated Luminosity & Goals



Collider Run IIA Peak Luminosity



Summary

- The week
 - 30 hours of unscheduled downtime
 - 5 shifts of studies
 - Overall an okay week; can do better

- Goal for this week
 - Increase pbar intensity
 - Increase stacking rate
 - Continue with stable store running